

DIRECT TESTIMONY AND EXHIBITS OF
MICHAEL L. SEAMAN-HUYNH
ON BEHALF OF
THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF
DOCKET NO. 2021-1-E
IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF
DUKE ENERGY PROGRESS, LLC

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Michael Seaman-Huynh. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as Deputy Director of Energy Operations at the Office of Regulatory Staff (“ORS”).

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received my Bachelor of Arts from the University of South Carolina in 1997. Prior to my employment with ORS, I was employed as an energy analyst with a private consulting firm. I joined ORS in 2006 as an Electric Utilities Specialist and was promoted to Senior Electric Utilities Specialist in 2010. When the Energy Regulation Department was formed in August 2015, I assumed the position of Senior Regulatory Analyst. In May 2016, the Utility Rates and Services Division was formed, and I was promoted to the position of Senior Regulatory Manager. I assumed my current position in August of 2019.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA (“COMMISSION”)?

1 A. Yes. I have previously testified before the Commission on numerous occasions in
2 connection with hearings concerning annual fuel clause proceedings, annual purchased gas
3 adjustment proceedings, general rate cases, and other various regulatory proceedings.

4 **Q. WHAT IS THE MISSION OF THE OFFICE OF REGULATORY STAFF?**

5 A. ORS represents the public interest as defined by the South Carolina General
6 Assembly as follows:

7 [T]he concerns of the using and consuming public with respect to public
8 utility services, regardless of the class of customer, and preservation of
9 continued investment in and maintenance of utility facilities so as to provide
10 reliable and high-quality utility services.

11 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY AND HOW DOES**
12 **YOUR DIRECT TESTIMONY REPRESENT THE PUBLIC INTEREST?**

13 A. The purpose of my direct testimony is to set forth ORS's recommendations
14 resulting from the examination and review of Duke Energy Progress, LLC's ("DEP" or
15 "Company") fuel expenses used in the generation of electricity to meet the Company's
16 retail customer requirements during the review period. The review period includes the
17 actual data for March 2020 through February 2021 ("Actual Period"), estimated data for
18 March 2021 through June 2021 ("Estimated Period"), and forecasted data for July 2021
19 through June 2022 ("Forecasted Period"). My review focused on evaluating the
20 Company's fuel procurement and forecasting policies, procedures, and activities to ensure
21 the Company made every reasonable effort to minimize fuel costs so as to provide reliable
22 and high-quality service to its customers.

23 **Q. WAS THE REVIEW PERFORMED BY YOU OR UNDER YOUR SUPERVISION?**

24 A. Yes. The review to which I testify was performed by me or under my supervision.

Q. WHAT DID ORS'S REVIEW OF THE COMPANY'S FUEL EXPENSES INVOLVE?

A. ORS examined various fuel related documents as part of the review. These documents address the Company's fuel, environmental, and purchased power expenses for the Actual, Estimated, and Forecasted Periods. In preparation for this proceeding, ORS analyzed the Company's monthly fuel reports, and examined the Company's contracts for nuclear fuel, coal, natural gas, fuel oil, transportation, and environmental reagents. ORS also evaluated the Company's policies and procedures for fuel procurement. All information was reviewed with reference to the Company's existing Adjustment for Fuel, Variable Environmental, Avoided Capacity, S.C. Code Ann. § 58-27-865 (the "Fuel Clause Statute"), and the Company's approved Distributed Energy Resource Program ("DERP"), S.C. Code Ann. § 58-39-140.

Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS'S REVIEW OF THE COMPANY'S PROPOSAL?

A. ORS met virtually with Company personnel from various departments to discuss and review fossil and nuclear fuel procurement, fuel transportation, environmental compliance costs and procedures, emission allowances, forecasting, and general Company policies and procedures pertaining to fuel procurement. In addition, ORS monitors the nuclear, coal, natural gas, transportation and renewable industries through industry and governmental publications.

Q. DID ORS REVIEW THE COMPANY'S NUCLEAR FUEL LABOR COSTS?

A. Yes. ORS reviewed the Company's labor costs regarding nuclear fuel procurement, nuclear core design, safety analysis, and fabrication surveillance and final receipt

inspection (“Nuclear Labor Costs”). Additionally, ORS conducted discovery and held discussions with Company personnel regarding its Nuclear Labor Costs. The Company and Duke Energy Carolinas, LLC have consistently been recovering these costs through the Fuel Clause Statute. ORS found that the Company has included these Nuclear Labor Costs in this proceeding in the same manner as requested by Dominion Energy South Carolina, Inc. (“DESC”) in Docket No. 2021-2-E. The Commission approved DESC’s request in Order No. 2021-296(A).

Q. DID ORS REVIEW THE COMPANY’S ENVIRONMENTAL COMPLIANCE RELATED COSTS?

A. Yes. ORS reviewed the Company’s environmental compliance related costs including allowances for nitrogen oxide (“NO_x”) and sulfur dioxide (“SO₂”) emissions, reagents (i.e., limestone, ammonia, urea, etc.), and chemicals used in the reduction of these emissions. The use of these chemicals and reagents reduces the Company’s NO_x and SO₂ emissions, and the costs associated with the use of these substances are included in the Company’s Adjustment for Fuel, Variable Environmental, Avoided Capacity, and DERP costs tariff as provided by the Fuel Clause Statute.

Q. DID ORS REVIEW THE ACCURACY OF THE COMPANY’S FORECAST?

A. Yes. As shown in Exhibit MSH-1, the Company’s actual megawatt-hour (“MWh”) sales were 10.23% lower than expected during the Actual Period. Exhibit MSH-2 shows, on average, the actual fuel costs for the Actual Period were 6.48% higher than the projected monthly fuel costs. Exhibit MSH-3 shows the actual base fuel expenses for the Actual Period were 3.74% lower than the Company’s projections for the Actual Period.

Q. PLEASE DISCUSS ORS'S REVIEW OF THE COMPANY'S FORECASTED SALES AND COSTS FOR THE ESTIMATED AND FORECASTED PERIODS.

A. ORS reviewed the Company's projected sales and performed a comparative analysis to the projections from its last fuel proceeding in Docket No. 2020-1-E and sales from the Actual Period. ORS found the Company's sales projections to be reasonable and in line with historical sales data.

ORS reviewed the Company's forecasted costs for nuclear fuel, coal, natural gas, fuel oil, transportation, and environmental reagents for the Estimated and Forecasted Periods. ORS compared the monthly projected costs to historical projections from Docket No. 2020-1-E, actual data from the Actual Period, and commodity prices from numerous industry publications. ORS found the Company's forecasted costs to be reasonable.

Q. PLEASE EXPLAIN THE PRIMARY DRIVERS OF THE COMPANY'S REQUEST FOR A RATE CHANGE IN THIS PROCEEDING.

A. Exhibit MSH-4 shows the cumulative ending period balances of base fuel, environmental and capacity, and DERP avoided costs beginning in February 2011. As of February 2021, the Company had a cumulative base fuel under-recovery balance of \$10,891,999, a cumulative environmental over-recovery balance of \$348,872, a cumulative capacity related under-recovery balance of \$5,044,755, and a cumulative DERP avoided costs over-recovery balance of \$19,308. This is reflected in ORS witness Briseno's Audit Exhibit ADB-4. As shown on ORS witness Briseno's Audit Exhibit ADB-4, ORS projects the Company to have a cumulative base fuel under-recovery balance of \$9,257,171, a cumulative environmental over-recovery balance of \$483,867, a cumulative capacity related under-recovery balance of \$5,491,439, and a cumulative DERP avoided costs over-

recovery balance of \$36,804 by June 2021. While these under-recovery balances are greater than in the previous year (Docket No. 2020-1-E), the Company is forecasting decreased delivered coal and natural gas fuel expenses during the Forecasted Period.

Q. WHAT CHANGES DOES THE COMPANY REQUEST TO ITS CURRENTLY APPROVED FACTORS?

A. The Company requests the Commission approve a decrease to its currently approved Base Fuel Component (“Base Fuel Component”) for the Forecasted Period. Additionally, the Company requests to update its Variable Environmental Component (“Environmental Component”), Capacity Related Cost Component (“Capacity Related Component”), and DERP Avoided Cost Component (“DERP Avoided Cost Component”) to reflect the Company’s forecasted expenses and allocation of these expenses to each class of customer based on its contribution to the Company’s peak demands.

Q. DOES ORS RECOMMEND ANY ADJUSTMENTS TO THE FUEL FACTORS PROPOSED BY THE COMPANY?

A. No. ORS does not recommend any adjustments to the Company’s proposed fuel factors based on the Company’s historical and forecasted fuel expenses and customer sales.

Q. ARE THERE ANY ADDITIONAL FACTORS IN THIS DOCKET THAT WILL IMPACT CUSTOMERS’ BILLS?

A. Yes. The Company included proposed rates related to its DERP incremental expenses. ORS witness Morgan addresses the Company’s DERP incremental expenses to be recovered as a fixed charge (“DERP Charge”) on customer bills.

Q. WHAT IMPACT WILL THE PROPOSED CHANGE HAVE ON THE TYPICAL MONTHLY BILL OF A RESIDENTIAL CUSTOMER?

1 **A.** Exhibit MSH-5 is a summary of the proposed fuel factor components for each
2 customer class. If approved by the Commission, the rates proposed would decrease the
3 typical monthly bill for a Residential Customer on Rate RES using 1,000 kilowatt-hours
4 (“kWh”) from \$119.68 to approximately \$118.72, a net decrease of \$0.96 or 0.80%.

5 **Q. DOES ORS HAVE ANY ADDITIONAL RECOMMENDATIONS REGARDING**
6 **THE COMPANY’S ANNUAL FUEL FILINGS?**

7 **A.** Yes. ORS recommends that DEP provide a forecast to all interested parties of the
8 expected fuel factor to be set at its next annual fuel proceeding based upon its historical
9 (over)/under recovery to date and forecasts of prices for uranium, natural gas, coal, oil and
10 other fuel required for the generation of electricity. Additionally, the forecast would
11 provide the expected DERP Charge to be set at the Company’s next annual fuel proceeding
12 based upon DEP’s historical (over)/under-recovery to date and DEP’s forecast of DERP
13 incremental and avoided costs. ORS recommends these forecasts be provided during each
14 of the three (3) quarters in which there is no annual fuel proceeding but not in the quarter
15 where DEP makes its annual fuel filing. These forecasts would provide valuable
16 information for interested parties prior to the Company’s next fuel proceeding.

17 **Q. WILL YOU UPDATE YOUR DIRECT TESTIMONY BASED ON INFORMATION**
18 **THAT BECOMES AVAILABLE?**

19 **A.** Yes. ORS fully reserves the right to revise its recommendations via supplemental
20 testimony should new information not previously provided by the Company, or other
21 sources, become available.

22 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

23 **A.** Yes, it does.

Office of Regulatory Staff
Comparison of South Carolina Estimated to Actual Energy Sales
Duke Energy Progress, LLC
Docket No. 2021-1-E

EXHIBIT MSH-1

		2020										2021		Actual Period Total
		Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	
1	Actual Sales (MWh)	477,869	431,668	396,903	481,203	554,557	651,792	511,072	457,167	491,330	467,850	547,151	546,378	6,014,940
2	Estimated Sales (MWh)	543,645	505,471	498,280	536,146	634,401	656,320	597,922	531,887	496,464	537,358	586,052	576,343	6,700,290
3	Difference (1-2)	-65,776	-73,803	-101,377	-54,943	-79,844	-4,528	-86,850	-74,720	-5,134	-69,508	-38,901	-29,965	-685,350
4	Percent Difference (3/2)	-12.10%	-14.60%	-20.35%	-10.25%	-12.59%	-0.69%	-14.53%	-14.05%	-1.03%	-12.94%	-6.64%	-5.20%	-10.23%

Office of Regulatory Staff
Comparison of South Carolina Estimated to Actual Fuel Cost
Duke Energy Progress, LLC
Docket No. 2021-1-E

		2020										2021			Actual Period Average
		Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb		
1	Actual Experience (¢/kWh)	1.751	1.517	2.114	2.043	2.382	2.188	1.756	1.400	1.876	2.376	2.095	2.151	1.971	
2	Original Projection (¢/kWh)	1.838	1.646	1.866	2.041	1.971	1.896	1.730	1.564	1.904	2.015	1.884	1.857	1.851	
3	Amount in Base (¢/kWh)	2.075	2.075	2.075	2.075	1.887	1.887	1.887	1.887	1.887	1.887	1.887	1.887	1.950	
4	Variance from Actual ((1-2)/2)	-4.71%	-7.85%	13.28%	0.12%	20.86%	15.41%	1.53%	-10.51%	-1.49%	17.94%	11.23%	15.82%	6.48%	

Office of Regulatory Staff
Comparison of Estimated to Actual Base Fuel Costs
Duke Energy Progress, LLC
Docket No. 2021-1-E

		2020										2021		
		Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Actual Period Total
1	Actual Experience (Total \$)	\$8,367,365	\$6,547,617	\$8,391,758	\$9,829,368	\$13,209,046	\$14,262,790	\$8,976,864	\$6,401,768	\$9,215,170	\$11,116,665	\$11,464,696	\$11,753,264	\$119,536,371
	Original Projection (Total \$)	\$9,989,741	\$8,321,481	\$9,298,567	\$10,940,449	\$12,503,752	\$12,443,204	\$10,341,161	\$8,321,365	\$9,454,172	\$10,825,189	\$11,038,683	\$10,704,148	\$124,181,912
3	Difference [1]-[2]	-\$1,622,376	-\$1,773,864	-\$906,809	-\$1,111,081	\$705,294	\$1,819,586	-\$1,364,297	-\$1,919,597	-\$239,002	\$291,476	\$426,013	\$1,049,116	-\$4,645,541
4	Percent Difference [3]/[2]	-16.24%	-21.32%	-9.75%	-10.16%	5.64%	14.62%	-13.19%	-23.07%	-2.53%	2.69%	3.86%	9.80%	-3.74%

Office of Regulatory Staff
History of Cumulative Recovery Accounts
Duke Energy Progress, LLC
Docket No. 2021-1-E

EXHIBIT MSH-4

Period Ending	Base Fuel Costs (Over)/Under	Environmental Costs (Over)/Under	Capacity Costs (Over)/Under	DERP Avoided Costs (Over)/Under
February-11	\$ 10,418,111	\$ 99,386	N/A	N/A
February-12	\$ (5,129,003)	\$ 367,391	N/A	N/A
February-13	\$ (695,511)	\$ 318,611	N/A	N/A
February-14	\$ 21,559,994	\$ 558,851	N/A	N/A
February-15	\$ 20,760,123	\$ 60,632	\$ 1,799,759	N/A
February-16	\$ 6,564,246	\$ 364,914	\$ 1,907,835	N/A
February-17	\$ 6,872,181	\$ 618,034	\$ 893,261	\$ -
February-18	\$ 23,394,223	\$ (616,503)	\$ 1,622,069	\$ 2,715
February-19	\$ 13,424,397	\$ 199,209	\$ 574,928	\$ 19,286
February-20	\$ 8,184,897	\$ (86,729)	\$ 2,280,575	\$ 12,640
February-21	\$ 10,891,999	\$ (348,872)	\$ 5,044,755	\$ (19,308)

Office of Regulatory Staff

Proposed Fuel Factors

Duke Energy Progress, LLC

Docket No. 2021-1-E

EXHIBIT MSH-5

Proposed Proposed Fuel Factors (¢/kWh)					
Customer Class	Base Fuel Component	Environmental Component	Capacity Related Component	DERP Avoided Cost Component	Total Fuel Factor
Residential ¹	1.887	0.005	0.465	0.003	2.360
General Service (non-demand)	1.874	0.015	0.580	0.004	2.473
General Service (demand)	1.874	_ ²	_ ³	_ ⁴	1.874
Lighting	1.874	0.000	0.000	0.000	1.874

¹ The Residential Base Fuel Factor includes the Residential Energy Conservation Discount, Rider RECD-2C, adjustment factor of 0.7068%.

² The Proposed General Service (demand) Environmental Component is 4 cents per kW.

³ The Proposed General Service (demand) Capacity Related Component is 157 cents per kW.

⁴ The Proposed General Service (demand) DERP Avoided Cost Component is 1 cent per kW.